CERATOPOGONIDAE (DIPTERA) FROM ALGERIA I. PARABEZZIA GROGANI, N. SP. (STILOBEZZIINI)

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Abstract.—Parabezzia grogani, n. sp., from northern Algeria is described and illustrated. This is the first record of the genus Parabezzia from the Palaearctic Region and the fourth species known from the African continent.

The genus *Parabezzia* Malloch of the tribe Stilobezziini is a small group of predaceous midges of the New World and Africa. Three species have been described from the Afrotropical Region: *P. falcipennis* Clastrier (1960) from Zaire (Grogan, 1980, synonymized *P. insolita* Vattier and Adam, 1966, from the Congo Republic), *P. obscura* de Meillon and Wirth (1981b) from the Transvaal, and *P. stagni* de Meillon and Wirth (1981a) from the Transvaal. The description of this new species from northern Algeria is the first record of the genus from the Palaearctic Region.

Parabezzia grogani Szadziewski and Wirth, New Species Figs. 1–3

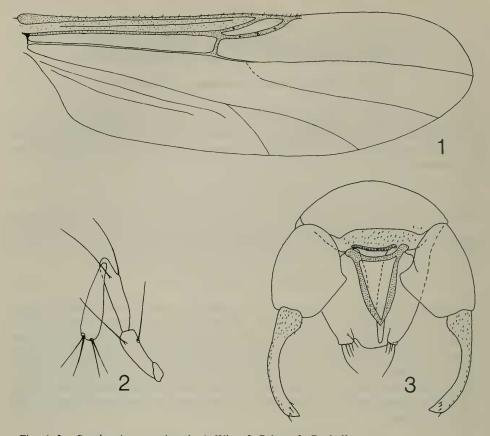
Diagnosis.—A dark brown species known from the male only, distinguished by having the wing with a low, dark, basal, costal swelling, the costal fringe long; palpus 4-segmented; male dististyle curved with tip bluntly pointed; and the aedeagus with main body triangular, lateral margins strongly sclerotized, and the distal process moderately long.

Male.—Wing length, 1.29-1.47 mm; breadth, 0.39-0.47 mm.

Head: Black; antennal pedicel black, flagellum dark brown. Eyes bare. Antenna with lengths of flagellar segments as follows (in μ m): 84-44-44-44-44-48-48-56-80-128-104-112. Palpus (Fig. 2) brownish; lengths of segments (μ m): I + II = 50, III = 62, IV = 68; sensory pit absent.

Thorax: Black, halter knob pale. Legs dark brown; fore- and midcoxae with long spinelike setae; 3 or 4 proximal tarsomeres pale; claws simple and equal, bifurcate on distal end; empodium absent. Lengths of leg segments as follows (μm) :

	fe	ti	ta ₁	ta ₂	ta ₃	ta ₄	ta ₅
foreleg	503	428	173	98	53	30	45
midleg	675	548	300	143	68	45	75
hindleg	668	578	263	143	83	45	90



Figs. 1-3. Parabezzia grogani, male. 1, Wing. 2, Palpus. 3, Genitalia.

Wing (Fig. 1) hyaline, anterior veins dark; a single radial cell (184–212 \times 24 μ m), surface with small microtrichia, macrotrichia absent; costa with long basal swelling, costal fringe with setae sparse and short; costa prolonged somewhat beyond radial cell.

Abdomen: Uniformly dark brown. Genitalia (Fig. 3): Ninth sternum with shallow excavation, membrane covered with small setae. Basistyle short and simple; dististyle long, with broad, pointed tip, basal portion swollen and covered with small setae, several longer setae present near tip, 1 or 2 rows of small setae along outer margin. Aedeagus triangular, basal arms rather well developed, hyaline distal process about ¼ of total length, distal portions of main body of aedeagus forming a triangle. Parameres fused, reduced to a slender rodlike structure reaching almost to base of distal process of aedeagus.

Female. - Unknown.

Material Examined.—Holotype &, Tichi near Benjaia, northern Algeria, sweeping at stream, 8 May 1981, R. Szadziewski leg.; paratype &, same data as holotype. Holotype deposited in the Institute of Zoology, Polish Academy of Science, Warsaw; paratype deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D.C.

Discussion.—The species is named for William L. Grogan, Jr., of Salisbury State College, Salisbury, Maryland, in recognition of his contributions to the study of the genus *Parabezzia*.

Parabezzia grogani belongs to the alexanderi Group of Parabezzia as defined by Grogan and Wirth (1977). The group is characterized by both sexes having wings with a basal swelling on the costa. In this group are known: P. alexanderi Wirth (1965) and P. texensis Grogan and Wirth (1977) from North America, P. blantoni Wirth (1965) and P. costalis Wirth (1965) from Panama, P. spangleri Wirth (1965) from Puerto Rico, and P. falcipennis Clastrier (1960) from Central Africa.

The male of *Parabezzia falcipennis* differs from the male of the new species by having the wing with a much larger costal swelling, covered as in *P. alexanderi* with short, strong spines; the costal fringe is short with only a few setae over the radial cell; the flagellum is yellowish with the last three segments darkened; the male dististyle has a narrow pointed tip, and the distal portion of the aedeagus is longer.

LITERATURE CITED

- Clastrier, J. 1960. Notes sur les Cératopogonidés X. Cératopogonidés de la République du Congo (2). Arch. Inst. Pasteur Alter. 38: 258-298.
- Grogan, W. L., Jr. 1980. A new synonym of the African biting midge *Parabezzia falcipennis* Clastrier (Diptera: Ceratopogonidae). Proc. Entomol. Soc. Wash. 82: 510.
- Grogan, W. L., Jr. and W. W. Wirth. 1977. A revision of the Nearctic species of *Parabezzia* Malloch (Diptera: Ceratopogonidae). J. Kans. Entomol. Soc. 50: 49–83.
- Meillon, B. de and W. W. Wirth. 1981a. Subsaharan Ceratopogonidae (Diptera) VI. New species and records of South African biting midges collected by A. L. Dyce. Ann. Natal Mus. 24: 525– 561.
- ——. 1981b. Subsaharan Ceratopogonidae (Diptera) VII. The biting midges of the Kruger National Park, South Africa, exclusive of the genus *Culicoides*. Ann. Natal Mus. 24: 563–601.
- Vattier, G. and J. P. Adam. 1966. Les Ceratopogonidae (Diptera) des grottes de la République du Congo (Brazzaville). Ann. Speleol. 21: 711–773.
- Wirth, W. W. 1965. A revision of the genus *Parabezzia* Malloch (Diptera, Ceratopogonidae). Proc. Entomol. Soc. Wash. 67: 215–230.